1989

Lake Winona dredging documents

Cal R. Fremling
Winona State University

2:25 PM
Wed.

Cal or Neal

Please Call

Craig Lenz

Minn DOT's

507-285-7226

Thursday AM

Re: Winona Marsh
Restoration Project

He gets to work about
7 AM too, so you can
call him then!

Done
Reported states
to him. DOT
is still
interested

twin city testing
corporation
662 CROMWELL AVENUE
ST. PAUL, MN 55114
PHONE 612/645-3601

REPORT OF: CHEMICAL ANALYSIS

PROJECT: WINONA PUBLIC WORKS: 4800-89-428

DATE: July 26, 1989

REPORTED TO: Twin City Testing-Rochester
Attn: Mr. Brad Peschong
3908 Commerce Ct. SW
Rochester, MN 55902

LABORATORY NO. 4410 89-5766

INTRODUCTION

This report presents the results of the analyses of two soil samples received on July 11, 1989 from a representative of Twin City Testing-Rochester. The scope of our analyses was the determination of polychlorinated biphenyls (PCBs) by gas chromatography and selected metals.

SAMPLE IDENTIFICATION

(#1) MAIN STREET - TCT # 135474
(#2) HAMILTON STREET - TCT # 135475

METHODOLOGY

PCBs

A portion of each sample was weighed and extracted with methylene chloride. The extract was dehydrated with anhydrous sodium sulfate, solvent switched to hexane, and concentrated to less than five milliliters in a Kuderna-Danish Concentrator on a steam bath. The concentrates were then analyzed using a HP5890A gas chromatograph equipped with an electron capture detector. PCBs were identified by column retention time and quantified by peak area comparisons to those of known standards using a VG Laboratory data system.

Metals

Selected metal concentrations were determined using EPA Test Methods for Evaluating Solid Wastes, SW-846, November 1986, 3rd Edition. Individual Methodologies are listed in Table 2.

RESULTS

The results are listed in Table 1 and Table 2.

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REMARKS

The samples were taken July 7 1989 and analyzed July 14 to July 24, 1989. The samples will be held for thirty days from the date of this report and then discarded unless other arrangements are made.

TWIN CITY TESTING CORPORATION

Nancy Soutor
Group Coordinator

Chris Bremer, Manager
Chromatography Section

NS/CB/kd

TABLE 1

PCB ANALYSIS

PCB Arcolor	Main Street	Hamilton Street	MDL (ug/kg)
1016	ND	ND	20
1221	ND	ND	20
1232	ND	ND	20
1242	ND	ND	20
1248	ND	ND	20
1254	ND	ND	20
1260	ND	ND	20

All values are in ug/kg, which is equal to parts-per-billion (ppb)

ND - Not Detected

MDL - Method Detection Limit

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TABLE 2

METALS RESULTS

Parameter	#1 Main Street	#2 Hamilton Street	Method Number	MDL (mg/kg)
Cadmium	3.3	4.5	6010	1.0
Chromium	12	19	6010	1.0
Copper	43	30	7210	1.0
Lead	ND	20	7420	10
Mercury	ND	ND	7471	0.02
Nickel	9.4	16	7520	1.0
Selenium	1.4	1.6	7740	0.4
Zinc	39	71	7910	2.5

LDL = Lower detectable limit

ND = Not detected; none present above lower detectable limit

All values are listed in mg/kg. mg/kg is equal to parts-per-million (ppm)

Laboratory No. 4410 89-5766

al ~~Dave Ted Nick~~

April 2, 1991 Bollant, Sorensen

Durenberger visited site yesterday. Will have staffer work on it.

Eric – send Skrong letter to Sperry
we should ask for exemption

Spooner – Call Merl Blong

Eric wait with letter from Skaggs until get letter from Ballman

Rockwell & Nick Rowse had obviously never seen our plans, only the Corps' permit request.

LAKE WINONA DREDGING
FILLING RIVERBEND IND PARK
3/28/91

NAME	REP.	PHONE #
ROBERT BOLLANT	CITY of WINONA	(507) 457-8274
Neal Mundahl	Winona State Univ.	(507) 457-5695
Allan Kean	Corps	612-220-0655
Dave Ballman	Corps	612-220-0373
Ted Rockwell	U.S EPA	612-297-5288
Nick Rowse	U.S FWS	612-725-3548
Cal Fremling	Winona State U	507-457-5276

DREDGING LAKE WINONA
AND
FILLING 96 ACRES IN
RIVERBEND INDUSTRIAL PARK

Neal Mundahl

I. City Administration and Cal Fremling met with the Corps, EPA and Fish and Wildlife on 03/28/91 to review comments on the Corps permit to dredge East Lake Winona and fill 96 acres of industrial land in Riverbend Industrial Park.

II. History:

A) The City has been actively seeking permits to fill Riverbend Industrial Park III since 1985.

B) At a meeting in Winona held 06/16/89 with Regulatory Agencies and Federal, State and Local Political Representatives, the conclusions were reached:

1. Permits to fill Riverbend Industrial Park cannot be granted without mitigation.

2. A local committee must be formed to work with the Corps of Engineers to develop mitigation plan.

a) The Corps directed the City to WES(Waterways Experimental Station), an independent arm of the Federal Government located in Vicksburg, Mississippi, set up to assist local governments prepare mitigation plans.

b) The City of Winona formally requested help from WES through the Corps of Engineers to prepare a mitigation plan.

c) The City formally requested WSU for the services of Dr. Cal Fremling to assist the City Director of Public Works to prepare a mitigation plan.

d) Both WES and WSU responded favorably to the City's requests and Dr. Cal Fremling, Professor Neal Mundahl and the Director of Public Works prepared a mitigation plan under the direction of WES.

III. Mitigation Plan:

A) The plan proposed restoring two marshes located between TH 61 and Lake Winona that were overrun with purple loosestrife in exchange for filling Riverbend Industrial Park.

B) As directed by WES an extensive wetland evaluation was accomplished under the direction of Dr. Cal Fremling and Professor Neal Mundahl. Dr. Fremling and Professor Mundahl personnally did most of the work. The "HEP Assessment" was used as directed by WES.

The mitigation plan showed a net gain for restoring both marshes 524 points
Loss of wetland by filling Riverbend 139
Total Project Impovements 385 points

This mitigation plan was submitted to both the Corps and WES and received favorable response.

IV. The Corps permits were reapplied for following the mitigation plan. The Corps of Engineers sent out Public Notice. The 30 day notice has been concluded. A meeting was held in Winona on 03/28/91 with representatives from the Corps of Engineers, EPA, Fish and Wildlife, U.S. Soil Conservation Service, Cal Fremling, Neal Mundahl and the Director of Public Works. The results of the meeting were very negative. The results of this meeting were:

A) Corps of Engineers will submit a letter to the City of Winona outlining deficiencies in the City's mitigation plan outlined as follows:

1. The loss of filling Riverbend is 45 times higher than the valuation set out in the mitigation report.

2. EPA does not acept wetland evaluation method using HEP(recommended to The City by WES).

3. EPA does not accept restoration of existing wetland as valuable. EPA wants non-wet lands established as wetlands for mitigation.

4. EPA thinks that dredging Lake Winona would suspend hazardous wastes into the water column.

5. EPA informed the City that EPA has VETO power over the Corps in wetland regulation.

6. On a positive note-Fish and Wildlife informed the City that Fish and Wildlife would be willing to work with the City in reevaluating Riverbend Development using the HEP assessment.

B) Dr. Fremling proposed doing a study of the soil in Riverbend to prove that the soil is not hydric(water saturated). The valve of this is questionable in light of the opinion of EPA.

Winona State University

Winona, Minnesota 55987

Telephone (507) 457-5000

18 January 1991

Mr. David Ballman, Ecologist
St. Paul District
U.S. Army Corps of Engineers
1421 U.S. Post Office & Custom House
St. Paul, MN 55101

Dear Mr. Ballman,

Regarding your January 15 telephone conversation with Dr. Fremling concerning our "Plan for Industrial Park Creation, Lake Dredging, and Wetland Restoration at Winona, Minnesota", we have reevaluated our HEP assessment of Riverbend Industrial Park and feel that it is correct. The vegetation analyses and piezometer readings contained in the plan support this assessment.

At this time, however, we would like to present new information concerning the HEP assessments for the two proposed wetland restoration sites. As stated in the original plan, we felt that the HEP assessments significantly overestimated the real wetland habitat quality of both the East and West Marshes. These areas are dominated by monotypic stands of purple loosestrife, which are of virtually no value to typical wetland wildlife, but the HEP procedure contains no methodology for the devaluation of such areas. In our assessments, loosestrife-dominated areas were classified as Type 2 wetland - fresh meadow, at 63 habitat units/acre. As a result of this classification, loosestrife areas were responsible for contributing 65% of the total habitat units present in the two wetlands. We felt that the magnitude of this contribution was inappropriate, but we were constrained by the HEP methodology.

Recent consultations with personnel of the U.S. Fish and Wildlife Service and the Minnesota Department of Transportation have lent support to our original concerns about HEP and the habitat quality of purple loosestrife stands. In light of these developments, we request that the original HEP assessments for the East and West Marshes be opened for negotiation, and following we present revised HEP assessments for the two wetlands and further rationale for the revisions.

The three U.S. Fish and Wildlife personnel whom we consulted informally agreed unanimously that a significant devaluation in HEP

habitat units was justified and necessary for areas dominated by purple loosestrife. They suggested that instead of using the Type 2 wetland value of 63 habitat units/acre for the loosestrife areas, a value of 15 habitat units/acre (approximately a 76% reduction in value) would be more representative (and may still be an overestimate) of the actual habitat quality provided by stands of purple loosestrife. Their reasoning was based on studies that have shown virtually no use of loosestrife stands by wetland wildlife. The revised HEP assessments for the East and West Marshes utilizing this suggested change for loosestrife areas, and the effects of this change on the rest of the project, are as follows:

HEP Assessment for East Marsh

Type 2 wetland - fresh meadow (loosestrife-dominated)	
11 acres @ 15 habitat units/acre	165 habitat units
Type 3 wetland - shallow fresh marsh	
0.75 acres @ 90 habitat units/acre	68 habitat units
Type 6 wetland - shrub swamp	
2.75 acres @ 76 habitat units/acre	209 habitat units
Total	442 habitat units

HEP Assessment of the West Marsh

Type 2 wetland - fresh meadow (loosestrife-dominated)	
6.25 acres @ 15 habitat units/acre	94 habitat units
Type 4 wetland - deep fresh marsh	
1.25 acres @ 96 habitat units/acre	120 habitat units
Type 6 wetland - shrub swamp	
2.50 acres @ 76 habitat units/acre	190 habitat units
Total	404 habitat units

HEP Assessment for Restored East Marsh

Type 4 wetland - deep fresh marsh	
12.29 acres @ 96 habitat units/acre	1179 habitat units
Type 6 wetland - shrub swamp	
1.89 acres @ 76 habitat units/acre	144 habitat units
Restored Total	1323 habitat units
Minus Prerestoration Total	-442 habitat units
Net Gain	881 habitat units

HEP Assessment for Restored West Marsh

Type 4 wetland - deep fresh marsh	
8.13 acres @ 96 habitat units/acre	780 habitat units
Type 6 wetland - shrub swamp	
1.25 acres @ 76 habitat units/acre	95 habitat units
Restored Total	875 habitat units
Minus Prerestoration Total	-404 habitat units
Net Gain	471 habitat units

Total Net Gain for Both Marshes	1352 habitat units
Loss of Wetland from Filling of Riverbend	-139 habitat units
Total Project Improvement in Wetland Habitat Quality	**1213 habitat units**

In summary, we feel that these revised HEP assessments reflect more accurately both the present state of the wetlands we have proposed for restoration, and the magnitude of the improvements to be achieved through the restorations.

Sincerely,

Neal O. Mundahl

Dr. Neal D. Mundahl, Assistant Professor
Department of Biology

Calvin R. Fremling

Dr. Calvin R. Fremling, Professor
Department of Biology

cc: Robert Bollant, Director of Public Works, Winona
Kermit McRae, District Engineer, Minnesota Department of Transportation, Rochester
Rick Berry, Manager, Upper Mississippi Refuge Complex, U.S. Fish and Wildlife Service, Winona
Nick Gulden, Area Game Manager, Minnesota Department of Natural Resources, Winona

Star Tribune/Wednesday/June 19/1991

Wetlands controversy spreading like wildfire

Washington Post

Washington, D.C.
A year ago, a mention of the Federal Interagency Committee for Wetland Delineation would guarantee a yawn; just another obscure government panel, working on another obscure regulation.

Now it is the environmental *cause célèbre* of Washington — a dispute that tests President Bush's campaign pledge to preserve wetlands, and underlines the painful tradeoffs that occur when conservation and business interests collide.

At issue is a manual drafted by the eight-member committee of scientists in 1989 to identify the kind of swamps, marshes and bogs worthy of protection from developers, timber companies and oil drillers. Known as the wetlands "bible," the manual ruffled enough industry feathers that the four federal agencies with members on the committee agreed to refine it after taking public comment.

But the issue turned political when a White House task force began debating ways of narrowing the definition of wetlands.

William Reilly, administrator of the Environmental Protection Agency (EPA), views the manual as too broad to enforce, guarding wetlands that are rarely wet. He said he wants to tighten qualifications for a wetland so that his agency can focus its resources on the important ones.

Yet Reilly represents a moderate voice on the wetlands task force, chaired by Teresa Gorman, a special assistant to the president known for her pro-business stance.

So far, different drafts circulated by the EPA have led to the resignation of one committee member, prompted another to "disassociate" himself from the process and caused the head of the U.S. Fish and Wildlife Service to issue a letter in which he formally refused to concur.

The task force was created to implement Bush's "no net loss" of wetlands pledge. During the 1950s and 1960s, the nation lost 450,000 acres a year of wetlands. The debate within the administration is spiced with such colorful language as "the splash test," and "the Uncle Dennis test," but it turns on dry, biological terms to determine how wet for how long a wetland must be.

The most conservative proposals by task force members would extend protections only to acres inundated for at least 30 consecutive days a year, supporting plants able to survive in the wettest environment and watery enough for ducks to splash in.

In the 1989 manual, wetlands were broadly defined as containing watery vegetation, watery soils and surface or underground water for prolonged periods.